

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of  
Inventor(s): Mills

App'n Ser. No.: 09/009,294

Filing Date: 01/20/1998

Title: HYDRIDE COMPOUNDS



Group Art Unit: 1745

Examiner(s): Kalafut *for*  
*Secret Committee*

June 28, 2005

**RESPONSE TO FINAL OFFICE ACTION  
MAILED JANUARY 7, 2005 AND NOTICE OF APPEAL**

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant files this Response to the Final Office Action mailed January 7, 2005. Please consider this paper as a Notice of Appeal and as a petition for three months extension.

Reconsideration and allowance of the above-identified application is respectfully requested. Claims 1-300 are pending in the present application.

Submitted with this Response is new, non-cumulative scientific evidence further demonstrating the existence of lower energy states of hydrogen in a number of different ways, including, but not limited to, studies of spectroscopic lines, energy output, compositions of matter, generated plasmas, and inverted hydrogen populations. As detailed below, Applicant also identifies independent third-party data pursuant to the PTO's agreement, which evidence resulted in verbal confirmation by Examiner Wayne Langel that two BlackLight applications formally handled by him were allowable before he was told to misrepresent that fact and, thus, was forced to resign from examining those cases "for moral and ethical reasons."

06/29/2005 SSITHIB1 00000117 09009294

02 FC:2253

510.00 DP

As further revealed by Examiner Langel, and confirmed by two other Examiners, "allowance is not an option" in any pending BlackLight application according to official PTO policy. Under that arbitrary policy, the anonymous group of individuals, i.e. "Secret Committee," responsible for directing the named Examiner's actions in this case has knowingly violated well-established patent laws and procedures in presuming Applicant's novel hydrogen technology to be *per se* incredible as an excuse for its failure to properly consider and evaluate the scientific evidence of record amassed by Applicant at great expense. [See, e.g., MPEP § 2107, pp. 2100-31 ("A conclusion that an asserted utility is incredible can be reached only after the Office has evaluated both the assertion of the applicant regarding utility and any evidentiary basis of that assertion. The [Examiner] should be particularly careful not to start with a presumption that an asserted utility is, *per se*, "incredible" and then proceed to base a rejection under 35 U.S.C. 101 on that presumption." )]]

To the limited extent that the Committee has begun to address Applicant's evidence in any of his pending cases, it has done so by relying primarily upon the biased views of its newest principal member, Dr. Bernard Eng-Kie Souw, who was assigned to replace Examiner Langel and examine all of BlackLight's pending applications. As discussed below, those biased views lack credibility not just on the merits, but also due to a genuine conflict of interest involving Dr. Souw's contemporaneous ownership of, and work as the lead scientist for, a company that competes with BlackLight in the same technical areas. Consequently, the Committee's rejections in all of BlackLight's cases, including this one, which have adopted Dr. Souw's biased views, are fatally defective and should be immediately withdrawn so that these cases can be allowed to issue.

The rejection of the claims 1-300 under 35 U.S.C. § 101 as being inoperative and lacking utility is respectfully traversed. Applicant respectfully submits that the Committee has not met its burden of raising a *prima facie* case of inoperability for the many reasons of record and, therefore, the rejection should be withdrawn for those reasons alone. Furthermore, Applicant has disclosed substantial experimental evidence in the present disclosure, prior submissions, and submissions herewith that fully rebut any *prima facie* case of inoperability the Committee might have raised. Applicant

responds more fully to the Committee's comments, discusses the experimental evidence of record, and summarizes the improper prosecution procedures used by the Committee in the following paragraphs. For these additional reasons, the Section 101 rejection should be withdrawn.

The related rejection of claims 1-300 under 35 U.S.C. § 112, first paragraph, as lacking enablement, is also respectfully traversed. Applicant respectfully submits that the Committee has not met its burden of raising a *prima facie* case of lack of enablement for the many reasons of record and, therefore, the rejection should be withdrawn for those reasons alone. Furthermore, Applicant has disclosed substantial experimental evidence in the present disclosure, prior submissions, and submissions herewith that fully rebut any *prima facie* case of lack of enablement the Committee might have raised. Applicant responds more fully to the Committee's comments, discusses the experimental evidence of record, and summarizes the improper prosecution procedures used by the Committee in the following paragraphs. For these additional reasons, the Section 112, first paragraph, rejection should be withdrawn.

Applicant has filed Rule 132 Declarations certifying his submitted experimental evidence, which further rebuts the Committee's unjustified utility and enablement rejections of the claimed invention. This evidence, which the Committee required Applicant to make public by submitting it to scientific journals for publication, conclusively confirms the formation of lower-energy hydrogen through practice of Applicant's novel hydrogen chemistry. To this day, the Committee has failed to properly consider the numerous Rule 132 Declarations previously filed by Applicant in violation of its own rules, as outlined in MPEP § 716:

Evidence traversing rejections must be considered by the examiner whenever present. All entered affidavits, declarations, and other evidence traversing rejections are acknowledged and commented upon by the examiner in the next succeeding action. ... Where the evidence is insufficient to overcome the rejection, the examiner must specifically explain why the evidence is insufficient. General statements such "the declaration lacks technical validity" or "the evidence is not commensurate with the scope of the claims" without an explanation supporting such findings are insufficient. [Emphasis added.]

The Committee does not even mention, let alone consider, most of the certified experimental evidence identified in Applicant's Rule 132 Declarations that were submitted to overcome the rejections of record.

### **Lower-Energy Hydrogen Experimental Data**

With this latest submission, Applicant now has over 100 articles and books of record in this case, as reflected in the "List of References" set forth below. These articles detail studies that experimentally confirm a novel reaction of atomic hydrogen, which produces hydrogen in fractional quantum states that are at lower energies than the traditional "ground" ( $n = 1$ ) state, a chemically generated or assisted plasma (rt-plasma), and novel hydride compounds, including:

extreme ultraviolet (EUV) spectroscopy,<sup>1</sup>  
characteristic emission from catalysis and the hydride ion products,<sup>2</sup>  
lower-energy hydrogen emission,<sup>3</sup>  
plasma formation,<sup>4</sup>  
Balmer  $\alpha$  line broadening,<sup>5</sup>  
population inversion of hydrogen lines,<sup>6</sup>  
elevated electron temperature,<sup>7</sup>  
anomalous plasma afterglow duration,<sup>8</sup>  
power generation,<sup>9</sup>  
excessive light emission,<sup>10</sup> and  
analysis of chemical compounds.<sup>11</sup>

---

<sup>1</sup> Reference Nos. 11-16, 20, 24, 27-29, 31-36, 39, 42-43, 46-47, 50-52, 54-55, 57, 59, 63, 65-68, 70-76, 78-79, 81, 83, 85, 86, 89, 91-93, 95-96, 98, 101, 104, 108-112.

<sup>2</sup> Reference Nos. 24, 27, 32, 39, 42, 46, 51-52, 55, 57, 68, 72-73, 81, 89, 91, 108.

<sup>3</sup> Reference Nos. 14, 28-29, 33-36, 50, 63, 67, 70-71, 73, 75-76, 78-79, 86-87, 90, 92, 93, 98, 101, 104, 110-112.

<sup>4</sup> Reference Nos. 11-13, 15-16, 20, 24, 27, 32, 39, 42, 46-47, 51-52, 54-55, 57, 72, 81, 89, 91-93, 108, 109.

<sup>5</sup> Reference Nos. 16, 20, 30, 33-37, 39, 42-43, 49, 51-52, 54-55, 57, 63-65, 68-69, 71-74, 81-85, 88-89, 91, 92, 93, 95-97, 105, 108, 109.

<sup>6</sup> Reference Nos. 39, 46, 51, 54, 55, 57, 59, 65-66, 68, 74, 83, 85, 89, 91.

<sup>7</sup> Reference Nos. 34-37, 43, 49, 63, 67, 73.

<sup>8</sup> Reference Nos. 12-13, 47, 81.

<sup>9</sup> Reference Nos. 30-31, 33, 35-36, 39, 43, 50, 63, 71-73, 76-77, 81, 84, 89, 92, 93, 98, 101, 104, 108, 110-112.

<sup>10</sup> Reference Nos. 11, 16, 20, 23, 31, 37, 43, 52, 72, 109.

<sup>11</sup> Reference Nos. 6-10, 19, 25, 38, 41, 44-45, 60-62, 64, 69, 75, 81-82, 87-88, 90, 92, 93, 94, 98, 100, 101, 104, 108, 110-112.

In addition, Applicant has shown that direct plasma to electric power conversion is possible using this novel hydrogen chemistry.<sup>12</sup>

A summary of Applicant's experimental data confirming the existence of lower-energy hydrogen is set forth below:

1.) the observation of intense extreme ultraviolet (EUV) emission at low temperatures (e.g.  $\approx 10^3 K$ ) from atomic hydrogen and only those atomized elements or gaseous ions which provide a net enthalpy of reaction of approximately  $m \cdot 27.2 eV$  via the ionization of  $t$  electrons to a continuum energy level where  $t$  and  $m$  are each an integer (e.g.  $K$  and  $Cs$  atoms and  $Rb^+$  and  $Sr^+$  ions ionize at integer multiples of the potential energy of atomic hydrogen and caused emission; whereas, the chemically similar atoms,  $Na$ ,  $Mg$ , and  $Ba$ , do not ionize at integer multiples of the potential energy of atomic hydrogen and caused no emission)<sup>13</sup>,

2.) the observation of novel EUV emission lines from microwave and glow discharges of helium with 2% hydrogen with energies of  $q \cdot 13.6 eV$  where  $q = 1, 2, 3, 4, 6, 7, 8, 9, 11, 12$  or these lines inelastically scattered by helium atoms in the excitation of  $He(1s^2)$  to  $He(1s^1 2p^1)$  that were identified as hydrogen transitions to electronic energy levels below the "ground" state corresponding to fractional quantum numbers<sup>14</sup>,

3.) the observation of novel EUV emission lines from microwave and glow discharges of helium with 2% hydrogen at  $44.2 nm$  and  $40.5 nm$  with energies of  $q \cdot 13.6 + \left( \frac{1}{n_f^2} - \frac{1}{n_i^2} \right) \cdot 13.6 eV$  where  $q = 2$  and  $n_f = 2, 4$   $n_i = \infty$  that corresponded to multipole coupling to give two-photon emission from a continuum excited state atom and an atom undergoing fractional Rydberg state transition<sup>15</sup>,

---

<sup>12</sup> Reference Nos. 18, 26, 40, 48, 56, 68

<sup>13</sup> Reference Nos. 11-13, 15-16, 20, 24, 27, 32, 39, 42, 46-47, 51-52, 54-55, 57, 72, 81, 89, 91-93, 108, 109

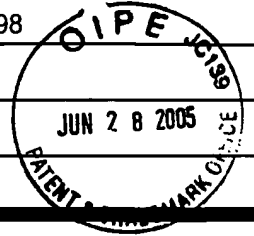
<sup>14</sup> Reference Nos. 28, 33-36, 50, 63, 67, 71, 73, 75-76, 78, 86-87, 90

<sup>15</sup> Reference Nos. 36, 71, 73

AFS IFU

Form: PTO/SB/17 (Modified)

<b>REPLY/AMENDMENT FEE TRANSMITTAL</b>		Attorney Docket No.	62-226-8A2
		Application Number	09/009,294
		Filing Date	January 20, 1998
		First Named Inventor	Mills
		Group Art Unit	1745
AMOUNT ENCLOSED	\$760	Examiner Name	Kalafut



**FEE CALCULATION** (fees effective 10/01/97)

CLAIMS AS AMENDED	Claims Remaining After Amendment	Highest Number Previously Paid For	Number Extra	Rate	Calculations
TOTAL CLAIMS	300	300	0 <sup>(3)</sup>	X \$18.00 =	
INDEPENDENT CLAIMS	18	18	0	X \$84.00 =	
Since an Official Action set an <u>original</u> due date of July 7, 2005, petition is hereby made for an extension to cover the date this reply is filed for which the requisite fee is enclosed (1 month (\$110); 2 months (\$400); 3 months (\$950); 4 months (\$1,510); 5 months (\$2,060)): 3 months					1020
Notice of Appeal					500
Total of above Calculations =					\$1520
Reduction by 50% for filing by small entity (37 CFR 1.9, 1.27 & 1.28)					-760
<b>TOTAL FEES DUE =</b>					<b>\$760</b>

(1) If entry (1) is less than entry (2), entry (3) is "0".  
 (2) If entry (2) is less than 20, change entry (2) to "20".  
 (4) If entry (4) is less than entry (5), entry (6) is "0".  
 (5) If entry (5) is less than 3, change entry (5) to "3".

**METHOD OF PAYMENT**

- ☒ Check enclosed as payment.  
☐ Charge "TOTAL FEES DUE" to the Deposit Account No., below.

**AUTHORIZATION**

- ☒ If the above-noted "AMOUNT ENCLOSED" is not correct, the Commissioner is hereby authorized to credit any overpayment or charge any additional fees under 37 CFR 1.16 or 1.17 necessary to maintain pendency of the present application to:

Deposit Account No.: 50-0687

OrderNo.: (Client/Matter) 62-226

**SUBMITTED BY: Manelli Denison & Selter, PLLC**

Typed Name	Jeffrey S. Melcher	Reg. No.	35,950
Signature		Date	June 28, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Re: Appeal to the Board of Patent Appeals and Interferences

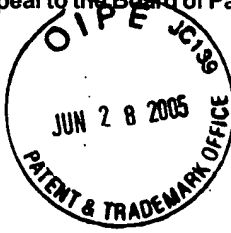
In re PATENT APPLICATION of  
Inventor(s): Mills

Appln. No.: 09/009,294

Filing Date: 1/20/1998

Title: HYDRIDE COMPOUNDS

Sir:



Group Art Unit: 1745

Examiner: Kalafut for Secret Committee

June 28, 2005

- 1 ☒ **NOTICE OF APPEAL:** Applicant hereby appeals to the Board of Patent Appeals and Interferences from the decision (not Advisory Action) dated of the Examiner twice/finally rejecting claims
- 2 ☐ **BRIEF** on appeal in this application attached in triplicate.
- 3 ☐ An **ORAL HEARING** is respectfully requested under Rule 194 (due two months after Examiner's Answer – unextendable).
- 4 ☐ Reply Brief is attached in triplicate (due two months after Examiner's Answer – unextendable).
- 5 ☒ "Small entity" ☐ herewith. ☒ previously.

<b>6 FEE CALCULATION:</b>		Large/Small Entity	
If box 1 above is X'd, see box 12 below <u>first</u> and decide: ..... enter		\$	\$500
If box 2 above is X'd, see box 12 below <u>first</u> and decide: ..... enter		\$	\$
If box 3 above is X'd, see box 12 below <u>first</u> and decide: ..... enter		\$	\$
If box 4 above is X'd, ..... enter nothing		- 0 - (no fee)	
<b>7. Original due date: Petition Requested and Fees Paid In Accompanying Fee Transmittal</b>			
8. Petition is hereby made to extend the original due date to cover the date this response is filed for which the requisite fee is attached		<div style="display: flex; flex-direction: column; align-items: center;"> <div>(1 months)</div> <div>(2 months)</div> <div>(3 months)</div> <div>(4 months)</div> <div>(5 months)</div> </div>	
9. Enter any previous extension fee paid [ ] previously since above original due date (item 7); [X] with concurrently filed amendment		-	
<b>10. Subtract line 9 from line 8 and enter: Total Extension Fee</b>			<b>0</b>
<b>11. TOTAL FEE ATTACHED =</b>			<b>\$Paid</b>

12. ☐ \*Fee NOT required if/since paid in prior appeal in which the Board of Patent Appeals and Interferences did not render a decision on the merits.

**CHARGE STATEMENT:** The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficient fee only) now or hereafter relative to this application and the resulting Official document under Rule 20, or credit any overpayment, to our Account/Order Nos. 50-0687/62226 for which purpose a duplicate copy of this sheet is attached. This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal form is filed.

**Manelli Denison & Selter, PLLC**

Customer No.: 20736

Att.:   
Jeffrey S. Melcher  
Reg. No. 35,950  
Tel: (202) 261-1045  
Fax: (202) 887-0336

06/29/2005 SSITHIB1 00000117 09009294

01 FC:2401

250.00 OP